

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Physical Optics Corporation

#### California Manufacturing Technology Consulting

#### Physical Optics Corporation Sets Its Sights On Increasing Sales

##### Client Profile:

Physical Optics Corporation pioneered the technology, development, and manufacturing of state-of-the-art optical and opto-electronic products. The company has two major divisions; one specializes in digital fiber optic electronic communication devices for the broadcast, multimedia, and communications industries, including industry clients such as TRW, Disney, and Tokyo Electric. The second specializes in optical holographic light-shaping diffusers used in displays, projectors, lenses, optical sensors, and lighting applications in automotive, electronics, aerospace, machinery, robotics, instrumentation, and architectural markets. The company's commercial manufacturing growth has averaged more than 50 percent per year, both from internal growth and from the establishment of subsidiary companies to exploit specific technologies developed by the parent company. Located in Torrance, California, Physical Optics has a workforce of 137 people.

##### Situation:

Physical Optics Corporation wanted to make its business processes more consistent and repeatable to keep pace with its growing manufacturing operations. Physical Optics particularly wanted to improve its processes for developing and designing new state-of-the-art products and translating those products into high-volume manufacturing. The company determined that developing an ISO 9000 quality management system--an internationally recognized standard--would help it achieve these goals. The company contacted the California Manufacturing Technology Center (CMTC), a NIST MEP network affiliate, for assistance.

##### Solution:

CMTC's six-phase ISO 9000 project with Physical Optics started in January 1999 and ended in December 1999. First, a CMTC team performed a gap audit to identify discrepancies between Physical Optics' existing quality system and the ISO 9000 standard, and to provide a baseline from which to launch the ISO program. The CMTC consulting team and the Physical Optics management team then performed an in-depth mapping and analysis of Physical Optics' business processes, particularly the core processes of identifying customer needs and designing and manufacturing custom products and systems to meet those needs. Subsequently, Physical Optics and CMTC worked together to develop the requisite ISO documentation and implemented the new ISO system into routine operations.

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CMTC also provided internal audit training and helped develop Physical Optics' internal auditing and management review programs. Lastly, CMTC performed a pre-registration audit to identify any remaining compliance gaps before Physical Optics applied for certification.

In January 2000, Physical Optics Corporation passed its registration audit and received its quality certificate from DNV, a worldwide registrar. The new quality management system helped Physical Optics improve internal business processes, resulting in fewer errors and re-work, better quality, and faster time to market. Physical Optics' new ISO 9000 Registration was well received by customers and has become a major factor in enabling the company to retain and increase sales. Physical Optics hired 15 new employees to support increased sales.

### **Results:**

Achieved ISO 9000 certification.

Increased sales from \$20.3 million to \$21.2 million year-over-year.

Created 15 new jobs and increased the workforce from 137 to 152.

Improved customer relations and opened new markets.

### **Testimonial:**

"The California Manufacturing Technology Center's assistance was critical in us achieving ISO 9000 certification. We streamlined operations and increased our commercial business. CMTC was one of the best investments we have made to help our business."

Gordon E. Drew, Chief Financial Officer